

REMARKS

The Examiner has rejected claims 1-7, 10, 12-13, 16-22, 24, 27 and 29-31 under 35 U.S.C. § 103(a) as being unpatentable over Baker U.S. Patent No. 3,952,179 in view of Maybon U.S. Patent No. 5,580,472. Claims 8, 9, 11, 15, 25 and 26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Baker U.S. Patent No. 3,952,179 and Maybon U.S. Patent No. 5,580,472 as applied to claims 1, 10, 13 and 22 above, and further in view of Cox et al. U.S. Patent No. 5,417,132.

No *Prima Facie* Case of Obviousness

"To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." MPEP § 2143. With respect to the combination of Baker and Maybon, the Examiner states that "the sole difference between Baker '179 and the claimed invention resides in the heat source used for cladding" and that "use of laser as a heat source is well known in the art as evidenced by the Maybon reference." With all due respect to the Examiner, Applicant believes this is an extreme oversimplification of the present factual situation. Baker uses known welding technology to produce hard blades on a relatively soft die body. The welding technique is incapable of producing near net shapes, and extensive machining must be used to define the cutting blade. Maybon does not relate to the cutting die industry, but rather relates to hardfacing or resurfacing the tops of ridges on a paper pulp defibering or refining plate. There is simply no teaching, suggestion, motivation, or problem or solution recognition in the prior art or elsewhere that would have led one of ordinary skill in the art to combine the references.

It would appear that the Examiner reasons that hard blades on soft die bodies are known, welding is known as a heat source, and lasers are known as a heat source, and therefore, the claimed invention is obvious. "Because there is 'a general rule that combination claims consist of combinations of old elements as well as new elements' . . . , '[t]he notion . . . that combination claims can be declared invalid merely upon finding similar elements in separate prior patents would necessarily destroy virtually all patents and cannot be the law under the statute, § 103.' " *Ruiz v. A.B. Chance Co.*, 57 U.S.P.Q.2d 1161, 1167 (Fed. Cir. 2000) (citing *Clearstream Wastewater Sys. v. Hydro-Action, Inc.*, 206 F.3d 1440, 1446, 54 U.S.P.Q.2d 1185, 1189-90 (Fed. Cir. 2000); *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1575, 1 U.S.P.Q.2d 1593, 1603 (Fed. Cir. 1987); *Arkie Lures, Inc. v. Gene Larew Tackle, Inc.*, 119 F.3d 953, 957, 43 U.S.P.Q.2d 1294, 1297 (Fed. Cir. 1997)). Applicant suggests that the Examiner is basing her rejection on the concept that each element of the claimed invention is old, and therefore the invention must be obvious. "The 'each-element-is-old' approach has been resoundingly rejected." *Pacific Technica Corp. v. U.S.*, 3 U.S.P.Q.2d 1168, 1180 (Cl. Ct. 1986) (citing *Amstar Corp. v. Envirotech Corp.*, 730 F.2d, 1476, 221 U.S.P.Q. 649 (Fed. Cir. 1984)). The courts have clearly stated that "[t]he test is not whether one device can be an appropriate substitute for another," *Ruiz*, at 1167, but rather whether "the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." *In re Dembiczak*, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999). "Likewise, there must be something in the prior art as a whole suggesting the desirability and obviousness of making the combination." *Pacific Technica*, at 1180. "Focusing on the obviousness of substitutions and differences instead of on the invention as a whole . . . [is] a legally improper way to simplify the

difficult determination of obviousness." *Ruiz*, at 1167 (citing *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1383, 231 U.S.P.Q. 81, 93 (Fed. Cir. 1986)). In accordance with the Federal Circuit decision of *In re Dembiczak*, the analysis of patentability under § 103 requires the "critical step of casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field" to avoid the "tempting but forbidden zone of hindsight." *In re Dembiczak*, at 1616-1617. A rigorous application of the requirement for a showing of the teaching or suggestion or motivation to combine prior art references is critical because "combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight." *Id.*

Baker is directed to the problem of producing hard blades on a cutting die, and the solution in Baker is to use welding techniques, followed by extensive machining. While lasers have been used for hardfacing, there is no suggestion in the references as a whole or elsewhere that lasers can be substituted for welding techniques to produce an entire blade pattern on the surface of a cutting die. Both the laser technique itself and the result of the laser technique are distinctly different than welding. The Examiner reasons that she is using Maybon only for the purpose of teaching a laser as a heat source, thereby ignoring the remaining teachings of the reference, as well as the field of application for those teachings. When considered as a whole, as all references should be, Maybon merely teaches laser hardfacing of cast ridges on a pulp refining plate, and teaches against full formation of the ridges by the laser. Maybon does not address the problem of full blade formation on a cutting die, and does not suggest that welding and laser

hardfacing are interchangeable techniques. There is nothing in the references as a whole that would suggest to one of ordinary skill in the cutting die industry to look to the field of hardfacing cast ridges on paper refining plates for a solution to the problem of die blade formation, nor does the Maybon reference provide a solution. Maybon only teaches hardfacing. Thus, Maybon is not clearly pertinent to the particular problem with which the inventors were involved, and does not teach or suggest the substitution that the Examiner makes. Applicant respectfully asserts that it is improper to pick and choose those features of a reference that are helpful and ignore the teachings of the reference as a whole. "Each prior art reference must be evaluated in its entirety, and all the prior art must be evaluated as a whole." *Hughes Aircraft Co. v. U.S.*, 8 U.S.P.Q.2d 1580, 1584 (Cl. Ct. 1988). "It is impermissible to disregard portions of a prior art reference that teach away from an invention, [a]nd at all costs, the mistake of picking random bits of various prior art references and employing them as a 'mosaic to recreate a facsimile of the claimed invention' must be avoided." *Id.* at 1586 (citing *Akzo, N.V. v. United States Int'l Trade Comm'n* 808 F.2d 1471, 1481, 1 U.S.P.Q.2d 1241, 1246 (Fed. Cir. 1986), *cert. denied*, 107 S.Ct. 2490 (1987); *W.L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1550, 220 U.S.P.Q. 303, 311 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984)). Considering each references as a whole, and the prior art as a whole, there is no teaching, suggestion or motivation to combine the references to arrive at the present invention. Because the Examiner bears the burden of establishing a case of *prima facie* obviousness, and that burden has not been met, as set forth above, Applicant respectfully requests that the rejections be withdrawn.

Secondary Indicia of Nonobviousness

Applicant respectfully suggests that the evidence of superior results, commercial success and long felt but unsolved need should not be brushed aside without a careful analysis of its relevancy. In this regard, Applicant suggests that the Examiner has not considered the evidence in the proper light. First, the affidavit of Mr. Madill is submitted for the purpose of establishing the nexus between the customer statements and the claimed invention. Mr. Madill is simply testifying that the dies referred to in the customer statements were made in accordance with the claimed invention, such that the accolades given by the customers can be attributed directly to the claimed invention. Mr. Madill's affidavit cannot be considered in a vacuum as if it alone were meant to establish nonobviousness. It is clearly to be considered in combination with the customer statements as a means by which the nexus is provided.

Applicant fails to understand the Examiner's requirement that Mr. Madill give competitive sales figures, as the purpose of the customer statements is to establish that the dies made in accordance with the claimed invention provide superior results in the nature of significantly increased die life compared to all other rotary dies now or previously used by those customers, and that the increased die life has a significant impact on the productivity of their plant operations. Applicant further fails to understand the requirement that Mr. Madill show that commercial success is not due to other factors such as advertising and promotion. While that requirement may have been applicable in *In re Heldt*, which involved evidence in the nature of increased sales, the requirement has no applicability to the present evidence. The customer statements are directed to those customer's actual experience of increased die life, and such

increased die life will be present regardless of whether Mr. Madill's company engages in no promotion/advertising or extensive promotion/advertising.

Regarding *In re Caveney*, the difference between the present invention and the prior art is the technique by which the blades are formed, and it is the blades that wear down causing the need for repair. The increased die life obtained by the dies of the present invention, as addressed by the customer statements, is thus attributable to a difference in the blades on the dies of the present invention and blades on the dies of the prior art. The difference in the blades, again, is the method of building them, i.e., laser cladding. Therefore, the superior results exhibited by the dies of the present invention are directly attributable to the difference of the claimed invention compared to the prior art. Thus, the present facts are not correlative with those in *In re Caveney*.

The Examiner states, with respect to Mr. Harrison and Mr. Bell, that they "merely provide a statement alleging an increase die life of the present invention" and they "fail to demonstrate unexpected results or properties." The MPEP (see § 716.02(a)) provides that evidence of unobvious or unexpected advantageous properties, such as superiority in a property the claimed invention shares with the prior art, can rebut *prima facie* obviousness. All rotary cutting dies have a wear life for the blades. The statements by Mr. Harrison and Mr. Bell assert that the dies of the claimed invention have superior wear life compared to all other dies that they are using, i.e., dies of the prior art. Mr. Harrison and Mr. Bell set forth the advantages obtained by increased wear life, including increased productivity and huge cost savings for their plants. This type of evidence of commercial success and long felt but unsolved need may be different than the type of evidence typically encountered by the Examiner, but that does not make it


irrelevant as objective indicia of unobviousness. The superior results related to blade wear life compared to prior die blades are unobvious and of great commercial practical significance, as evidenced by the affidavits of Mr. Harrison, Mr. Bell and Mr. Madill. The Examiner's reconsideration of these affidavits in light of the above explanations and comments is respectfully requested.

In view of the foregoing remarks given herein, Applicants respectfully believe this case is in condition for allowance and respectfully request allowance of the pending claims. If the Examiner believes any detailed language of the claims requires further discussion, the Examiner is respectfully asked to telephone the undersigned attorney so that the matter may be promptly resolved. The Examiner's prompt attention to this matter is appreciated.

Applicants are of the opinion that no additional fee is due as a result of this amendment. If any charges or credits are necessary to complete this communication, please apply them to deposit account no. 23-3000.

Respectfully submitted,

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